

Mr. Michael T. Davis

Calculus

Due: Wednesday, November 2

Section 2.4 Deriving Slope Functions

October 31, 2016

Name:

1. Use the limit as h approaches zero and the slope of a secant line to derive the slope function for the given function $f(x) = 2x^2 + 5$ at the point $x = a$. Show all the steps in the process very neatly and carefully. Do not rush through this.
2. Use the limit as h approaches zero and the slope of a secant line to derive the slope function for the given function $f(x) = 3x^2 - 7x$ at the point $x = a$. Show all the steps in the process very neatly and carefully. Do not rush through this.

3. Use the limit as h approaches zero and the slope of a secant line to derive the slope function for the given function $f(x) = x^3 - 4x^2$ at the point $x = a$. Show all the steps in the process very neatly and carefully. Do not rush through this.